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JUN 5 1984

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES AND ENERGY
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, Utah 84114
Telephone: (801) 533-5771

DIVISION OF OIL
GAS & MINING

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS
and
MINING AND RECLAMATION PLAN

Based on Provisions of the Mined Land Reclamation Act, Title 40-8, Utah
Code Annotated 1953, General Rules and Regulations and Rules of Practice and
Procedures, By Order of the Board of Oil, Gas and Mining.

Revised May 30, 1984

Mine Name: North Lily Project

Mine Plan Date: August 25, 1983

File No.: PRO/023/007
ACT/

Date Received: June 5.

Operator: Affiliated Mining Inc.

DOGM Lead Reviewer: Tom Tetting +

Mineral(s) to be Mined: Precious Metal Tailings

Shannon Stormed

Please attach other sheets as needed and include cross-reference page
numbers when used.

1. Name of Applicant or Company: Affiliated Mining Inc.
Corporation (X) Partnership () Individual ()

2. Address: Permanent: 555 First Security Bldg., 405 South Main Street
Salt Lake City, Utah 84111

Temporary: _____

3. Company Representative: Name: Bart Hanford

Title: Project Engineer

Address: 555 First Security Bldg.

Phone: 801-363-1111

405 So. Main St. SLC, UT 84111

4. Location of Operation: County(ies) Juab

Township(s): 10S

Range(s): 3W

Section(s): 35

Township(s): _____

Range(s): _____

Section(s): _____

Township(s): _____

Range(s): _____

Section(s): _____

5. Owner(s) of record of the surface area within the land to be affected:

Name: North Lily Mining Co.

Address: Same as above

Name: _____

Address: _____

Name: _____

Address: _____

Name: _____

Address: _____

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	Name	Title	Address
A.	<u>Claude K. Lee</u>	<u>Secretary</u>	<u>Box 266, Paxton, IL 60957</u>
B.	<u>Sam B. Miller</u>	<u>Treasurer</u>	<u>Suite 600, 300 Union Blvd. Lakewood CO</u>
C.	<u>August E. Waegemann</u>	<u>President</u>	<u>1740 Crockett Ln. Hillsborough, CA 94</u>
D.	<u>Douglas K. Lee</u>	<u>Vice President</u>	<u>P.O. Box 1659, Orem, UT 84057</u>

12. Has the Applicant, any subsidiary or affiliate or any person, partnership, association, trust or corporation controlled by or under common control with the Applicant, or any person required to be identified by Item 11 ever had an approval of a Notice of Intention to Mine or Explore withdrawn or has surety relating thereto ever been forfeited? () Yes, (X) No.

If yes, please explain: _____

Please note: Section 40-8-13 of the Act provides that information relating to the location, size or nature of the deposit, and marked confidential by the Operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the Operator, or until the mining operation has been terminated as provided in Subsection (2) of Section 40-8-21 of the Act. This material should be so marked and included on separate cross-referenced sheets.

13. All maps and plans prepared for submission shall be of adequate scale and detail to show topographic features and clearly indicate the following details:

- A. Location and delineation of the extent of the land previously affected, as well as the proposed surface disturbance. Exhibit #1
- B. Existing active or inactive, underground or surface mined areas. None
- C. Boundaries of surface properties, including ownership. Exhibit #2, Pink Outline
- D. Names and locations of:
 - (1) Lakes, rivers, streams, creeks and springs.
 - (2) Roads, highways and buildings. Exhibit #1
 - (3) Active or abandoned facilities. Exhibit #1
 - (4) Transmission lines within 500 feet of the exterior limits of None land affected.
 - (5) Gas and/or oil pipelines. None
 - (6) Site elevation. 6080' Exhibit #1
- E. Drainage patterns of land affected: Exhibit #2
 - (1) Overburden or topsoil removal and storage areas. Exhibit #1
 - (2) Areas susceptible to erosion. None
 - (3) Natural waterways. None
 - (4) Constructed drainages, diversions, berms and sediment ponds None (design calculations shall be included).
 - (5) Receiving waters (State Health classification). None
 - (6) Directional flow of all surface waters (indicated by arrows). Exhibit #2
- F. Known drill holes: Exhibit #1
 - (1) Location. 3000 ft. West
 - (2) Status. 8" Process Well

- (3) Depths and thicknesses of:*
- a. Water bearing strata. Well depth is 530 feet
 - b. Mineral deposits. None
 - c. Toxic or potentially toxic materials. None
 - d. Surficial or plant supporting material (topsoil and subsoil). Well is 3000 ft. from area of disturbance
- G. Locations of disposal and stockpile areas: Exhibit #1 and #2
- (1) Topsoil and subsoil storage areas. Exhibit #1
 - (2) Overburden storage area. None
 - (3) Waste, tailings, rejected materials. Exhibit #2
 - (4) Raw ore stockpile(s). Exhibit #2
 - (5) Tailings-ponds and other sediment control structures. Exhibit #1 and #2
 - (6) Discharge points, water effluents (see #15[D]). None

All maps should have a color code or other suitable legend used in preparation to clearly indicate surface features of the land affected. A general reference map completed on a 7.5 (1:24,000) USGS quadrangle sheet is recommended with additional large scale maps included for practical delineation of individual facilities, (e.g., 1:200, 1:500).

14. Acreage to be disturbed:

- A. Minesite (operating, storage, disposal areas, etc.): Less than 5 acres (total)
- B. Access/haul roads/conveyors: - None, will use existing abandoned county roads
- C. Associated on-site processing facilities: 1 acre (part of 14-A)

15. Describe mining method to be employed, including: None

A. Mining sequence:

- (1) Map delineating the yearly sequential disturbance (if surface mine) and/or surficial disturbance. None
- (2) Narrative (including on-site processing or mineral treatment):
Tailings and mine dumps on company property will be
reprocessed by crushing, screening, flotation and cyanidation.

Attach supplemental sheets and/or diagrams as necessary with cross reference to page number here: Exhibit #5

*Stratigraphic or lithologic logs if correlated to footage depths may be presented when labeled (maps or logs should be labeled confidential, if so desired).

B. If sedimentary deposit seam(s):

(1) Thickness(es): Not Applicable

(2) Dip: _____

(3) Outcrop: _____

C. Will any underground workings or aquifers be encountered? () Yes, (X) No. If yes, describe potential impacts and protection measures to be taken: _____

D. Describe any active discharge or proposed discharge of water from mine or site area. Include water quality data and lab test reports. If attached sheets or reports are included, cross reference to page number here: _____

None - All solutions will be re-cycled and it is passed through activated charcoal as part of the water requirement for processing.

16. Have all necessary water rights been appropriated? (X) Yes, () No. How will water be obtained? Please explain: A water well permit has been received and well has been drilled.

17. Proposed or estimated duration of mining operation: 48 to 72 months
Will the permit term be for a lesser amount of time, subject to review? (e.g., for surety estimate reasons). () Yes, (X) No. If yes, how long? _____

18. Describe the construction and maintenance of access roads including:

A. Procedures (drainage and erosion control methods).

B. Cross section(s).

C. Profile(s) of proposed road grade(s).

No new access roads will be required since the plant is located beside a main State Highway (HWY 6-50)

Attach supplemental diagrams and cross reference to page number here: _____

19. Prior land use(s): Grazing, Smelting & Milling

Current land use(s): Slag dump, mill tailings storage

Possible projected or prospective future land use(s): Tailings storage, minimal wildlife habitat

20. Describe methods of tree and brush removal: Mechanical scrapers will be used to remove the sparse vegetation along with the topsoil.
- _____
- _____
- _____

Provide estimate of, and method of obtaining existing vegetation cover (%):
The Company has retained Native Plant Inc. to survey the area of proposed disturbance. The work is in progress and a report will be issued that appears in Exhibit (7)

What types of dominant vegetation are present? Mostly sagebrush and rabbitbrush with minimal miscellaneous grasses plus a few pinyon pine and junipers.

Photographs and/or maps may be attached to these forms, cross reference to page number here: _____.

21. Soils (surficial plant supportive material) and overburden: Except where slope or rocky terrain make it impossible, all surficial materials suitable as a growth medium shall be removed, segregated and stockpiled according to its ability to support vegetation (as determined by soil analysis and/or practical revegetation experience) prior to any major excavation. (Suggested minimum requirements are the top six inches, or the "A" horizon, whichever is larger.)

- A. What is the pH range of the soil before mining? 7.8 to 8.8
Name of person or agency and method of determining pH: Front Range Labs, Ft. Collins, Colorado, used paste technique with PH meter.
Attach lab report if available. Cross reference page number here: Not Available
- B. Average depth of topsoil and subsoil to be stripped and stockpiled: 6" to 12". Calculated volume of soil to be stockpiled: Approximately 8000 Cu. Yds.
- C. Describe the method for removing and stockpiling topsoil and subsoil, including measures to protect topsoil from wind and water erosion, compaction and pollutants: Shoved to side of area by scrapers and to minimize wind and water erosion, a quick growing cover will be seeded over it.
- _____
- _____
- D. Describe the method for removing and stockpiling overburden. Describe and discuss the acidity or alkalinity (pH) or other characteristics which would affect revegetation: No overburden will be removed from the site.
- _____
- _____
- _____
- _____

- E. Rock subjected to processing such as waste rock, tailings, etc., and which is to be disposed of on- or off-site must be subjected to a toxicity analysis. The method of determination, results and suitable disposal methods must be explained in detail, including means for containment and long range stability*:

See Exhibit #9

22. Describe the methods used to minimize public safety and welfare hazards during and after mining operations including:

- A. Shaft, tunnel and drill hole closure. None
- B. Disposal of trash, scrap metal and wood and extraneous debris, waste oil and solvents, unusable buildings and foundations, sewage and other materials incident to mining.
- C. Posting of appropriate warning signs and/or fences or berms to act as barriers (e.g., above highwalls) in locations where public access is available.

No shafts or tunnels are involved in the proposed plan. Trash will be kept in a bin and hauled to the City dump periodically. Scrap metal, extra wood, supplies, etc. will be kept in a building or fenced yard used for that purpose. Chemical toilets will be used initially for personal use. Mill signs will be placed on the property.

*"Toxic" means any chemical or biological or adverse characteristic of the material involved which could reasonably be expected to negatively affect ecological or hydrological systems or could be hazardous to the public safety and welfare.

23. Grading and soil redistribution.

- A. Attach pre- and postmining contour cross sections, typical of regrading designs. Cross reference to page number here: _____.
- B. Describe the method(s) of overburden replacement and stabilization and highwall elimination, including: (a) slope factors; (b) lift heights; (c) compaction; (d) terracing, etc., (e) also include testing procedures: This entails no mining; a portion of existing tailings or dump materials are to be reprocessed. This will result in no movement of overburden or replacement. Vertical profiles of existing piles will be reduced and the creation of a broad, flatter tailings pile will fill in and cover hazardous portions of an old, abandoned mill site on patented land. See (Exhibit #6) Proposed Tails Disposal and Reclamation Plans #1 and #2 and Process Graphical Display.
-
-
- C. What method of spreading topsoil and subsoil or upper horizon material on the regraded area will be employed? Rubber tired and track mounted loaders, scrapers or dozers will be used as appropriate to the area on slope.
-
1. Indicate the approximate depth of soil cover after final surfacing 4 to 8 inches.
 2. What tests will be performed to adequately evaluate the potential of the soil to successfully support intended revegetation? None since surface topsoil will be stripped off, stockpiled and reused, it should support the same area type vegetation it now has. Soil analysis by Rocky Mt. Geochem has been submitted (Exhibit #7)
 3. What soil amendments or fertilizers will be needed as an aid to revegetation? Native Plant Inc. has been retained by Affiliated Type: to advise. A report will be issued. (Exhibit #7)
Type: _____ Rate: _____
Type: _____ Rate: _____
 4. What additional surface preparations will be used? Describe (a) drainage, erosion and sediment control measures; (b) maximum slope characteristics; and (c) highwall reclamation. Grading machinery will be used to smooth surfaces and then the stockpiled topsoils will be used to cover the finished tailing heap and mill site area. Tailings impoundment sides will not exceed 45° and will be contoured to minimize the possibility of soil erosion. (Note that existing roadways with similar slopes in the tailings area are not eroded after approximately seventy years with only natural revegetation).

5. Describe methods which may be particularly applicable to waste disposal areas determined to be potential problem areas.

City dump will be used for disposition of misc. scrap wood, metal and wastes.

- D. Describe plans for either leaving or reclaiming the roads and pads associated with the operation. The structures and foundations installed for this operation will be removed and the areas will be regraded and revegetated to its approximate original topography and vegetative habitat wherever possible.

24. Impoundments: All evaporation, tailings and sediment ponds; spoil piles, fills, pads and regraded areas shall be self-draining and nonimpounding when abandoned unless previously approved as an impounding facility by a lawful state or federal agency. In view of this, please describe the reclamation of all related areas in the operation and include pertinent items enumerated in C, 1-5 above.

Same as 23 - C & D above.

25. Revegetation plans:

- A. What organization, agency or person will specifically be performing the revegetation? Native Plant Inc.
- B. Will the affected area be subject to livestock or wildlife grazing?
() Yes, (X) No. Will vegetation protection be needed to allow for a determination of the successful revegetation criteria outlined in the Mined Land Reclamation Act, Rule M-10(12)? (X) Yes, () No. If yes, what measures will the operator take?

Same as 25F

- C. Will irrigation be used? () Yes, (X) No. Type: _____
_____ For how long? _____

D. Test plots initiated during the early stages of mine development provide good bases from which a successful revegetation program can be adapted for later implementation. Will test plots be employed? (X) Yes, () No. If yes, describe on an additional sheet(s) and attach. Cross reference page number here and show location on facilities map: _____.

E. Please attach a revegetation plan and schedule including: See Exhibit #4

1. Species to be used.
2. Rate of seed application/acre.
3. Season to be planted.
4. Seedbed preparation techniques.
5. Planting location, slope face direction, variability, method of application, covering, etc. Seed will be applied by broadcasting.
6. Mulch and fertilizer application, if used. None

F. Describe any other maintenance procedures which may be used, if needed, to guarantee successful revegetation: The Company retains a permanent watchman and has done so for 30 years to protect surface structures and equipment. It plans to retain one as long as required. As part of his new responsibilities, revegetation plots will be examined regularly and soil samples will be taken yearly so long as needed. If the guard reports a deficient vegetation cover, the Company plans to retain Native Plant Inc. to restore the poor plots to State standards.

26. Please provide a reclamation schedule including:

- A. Estimated time for construction. 6 months
- B. Estimated time for interim reclamation. 1 month
- C. Estimated duration of the mining operation. Milling: 48 to 72 months
- D. A time table for the accomplishment of each major step in the reclamation plans. Attach the schedule and cross reference to the page number here: All reclamation will be completed within one year of completion of milling activities. It will be ongoing.

27. A surety guarantee must be provided for the mining operation (see Rule M-5 Mined Land Reclamation Act). In calculating this amount, the Division will consider the following major steps based on the information provided in this report:

- A. Clean up and removal of structures.
- B. Backfilling, grading and contouring.
- C. Topsoil and subsoil redistribution and stabilization.
- D. Revegetation (i.e., preparation, seeding, mulching, irrigation).
- E. Labor.
- F. Safety and fencing.
- G. Monitoring, and reseeded if necessary. Approximately \$10,000 per similar site cost in 1983.

To assist the Division, the operator may attach a list of costs and factors which would satisfy these areas. Substantiation of these factors, i.e., unit costs and how they are derived, should accompany the list. Cross reference the page number here: _____.

28. A request for a variance from specific commitments to Rule M-10 (Reclamation Standards) of the Mined Land Reclamation Act may be submitted with adequate written justification. If after presentation of information adequately detailing the situation, a determination is made that finds a portion of the rule inapplicable, a variance may be granted by the Division.

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas and Mining on March 22, 1978.

The applicant will achieve the reclamation standards for the following categories as outlined in Rule M-10 on all areas of land affected by this mine, unless a variance is granted in writing by the Division.

<u>Rule</u>	<u>Category of Commitment</u>	<u>Variance Requested?</u>
M-10(1)	Land Use	
M-10(2)	Public Safety and Welfare	
M-10(3)	Impoundments	X
M-10(4)	Slopes	
M-10(5)	Highwalls	
M-10(6)	Toxic Materials	X
M-10(7)	Roads and Pads	
M-10(8)	Drainages	
M-10(9)	Structures and Equipment	
M-10(10)	Shafts and Portals	
M-10(11)	Sediment Control	X
M-10(12)	Revegetation	
M-10(13)	Dams	
M-10(14)	Soils	X

I believe a variance is justified on a site-specific basis for the previous subsections of Rule M-10 as indicated. A narrative statement explaining these concerns is attached. EXHIBITS

STATE OF

Utah

COUNTY OF

Salt Lake

I, Bartlett J. Hubbard, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed:

Bartlett J. Hubbard

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 30th day of May, 1984.

Notary Public:

Marilyn Starnes

My Commission Expires:

Aug 3, 1985

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: () Yes (X) No

TABLE OF CONTENTS

Exhibit #1	Proposed Project Site, New and Old Surface Disturbance
Exhibit #2	Land Ownership and Drainage
Exhibit #3	Contour Map, U.S.G.S.
Exhibit #4	Proposed Grass Seed
Exhibit #5	1 Inch = 40 Ft. Drawing of Mill
Exhibit #6	Proposed Tails Disposal and Reclamation
Exhibit #7	Report Native Plant, Inc., Existing Vegetation, Soil Analysis, Analysis of Tails Pile
Exhibit #8	Bonding Requirements
Exhibit #9	21-E, Form MR-1, Page 7 of 12
Exhibit #10	Explanation of Variance

25-E, Page 10 of Form MR-1 "Revegetation"

Following the spreading of the topsoil over the reclaimed areas, seed will be broadcast in the following blend and rates:

Crested wheatgrass - 3 lbs Pure Live Seed (PLS)/ac
Western wheatgrass - 6 lbs PLC/ac
Indian ricegrass - 4 lbs PLS/ac
Palmer penstemon - 1/2 lb PLS/ac
Western yarrow - 1/4 lb PLS/ac
Yellow sweetclover - 3 lbs PLS/ac
Alfalfa - 3 lbs PLS/ac
Big sagebrush - 1/2 lb PLS/ac
Rubber rabbitbrush - 1/2 lb PLS/ac
Antelope bitterbrush - 3 lbs PLS/ac

TOTAL- 23 3/4 PLS/ac

Reclamation work and seeding will be done in the fall, prior to winter snowfall.